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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,970	04/04/2006	Gunther Heil	600.002	7335
58152 7590 01/31/2008 DEFILLO & ASSOCIATES, INC. P.O. Box 14104 Clearwater, FL 33766			EXAMINER FERNSTROM, KURT	
			ART UNIT 3711	PAPER NUMBER
			MAIL DATE 01/31/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/563,970	<b>Applicant(s)</b> HEIL, GUNTHER	
	<b>Examiner</b> Kurt Fernstrom	<b>Art Unit</b> 3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

According the recently published "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (1300 OG 142, 22 November 2005), the analysis for determining patent eligible subject matter under §101 can be said to be subject to the following criteria:

1. Does the claimed invention fall within one of the four statutory categories (process, machine, manufacture or composition of matter)? If the answer to this criterion is no, then the claimed invention is not statutory eligible subject matter.
2. If the answer is yes to the first criterion, then does the claimed invention fall within a judicial exception? If the answer to this criterion is no, then the claimed invention would be statutory eligible subject matter.
3. If the answer is yes to the second criterion, then does the claimed invention provide a practical application of the judicial exception? If the answer to this criterion is yes, then the claimed invention would be statutory eligible subject matter, unless the claimed invention effectively preempts all substantial practical applications of the judicial exception, in

which case the claimed invention would not be statutory eligible subject matter.

4. If the answer to the third criterion is no, then the claimed invention is not statutory eligible subject matter and is not eligible for patent protection.

With regards to the first criterion, the claimed invention is an aid for learning calculations, comprising colored geometric bodies. No tangible medium is recited as part of the invention. The display as recited could be printed on a tangible medium, a display on a television or computer screen, a projection onto a screen or wall by a projector, or any other means of providing a display. Because no tangible medium is recited, the claimed invention is not a "process", "machine", "manufacture" or "composition of matter", and thus fails to meet the requirements of 35 U.S.C. 101.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karunamuni in view of Bazacus. Karunamuni discloses in column 7, lines 30-50 of the specification a device for teaching mathematics comprising objects having numbers inscribed thereon. Karunamuni further discloses that the shapes of the objects differ, each step defining a decimal step position. Tens and ones are explicitly disclosed;

however, hundreds and thousands are considered to be obvious variations on the teachings of Karunamuni. Karunamuni fails to disclose that a different color is associated with each number. However, this feature is well known, as disclosed for example by Bazacus. It would have been obvious to one of ordinary skill in the art to modify the teachings of Karunamuni by providing a different color for each number for the purpose of providing visual associations for a user. With respect to claim 10, the bodies of Karunamuni are stackable. With respect to claims 11 and 16, the particular shapes are considered to be nonfunctional aesthetic choices of design, and obvious variations on the teachings of the prior art. In particular, no function is described for the bodies of claim 16.

Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karunamuni in view of Bazacus, and further in view of Narcise. Karunamuni as viewed in combination with Bazacus discloses all of the limitations of the claims with the exception of the numbers being arranged in a table. It is very well known to arrange numbers 1 through 100 in a table as recited, as shown for example by Narcise. It would have been obvious to one of ordinary skill in the art to modify the teachings of Karunamuni as viewed in combination with Bazacus by providing a number table for the purpose of allowing a user to easily view the numbers one through one hundred.

Applicant is also advised that were the claims amended to more clearly recite the indicia printed on a paper or other medium, as appears to essentially be the invention, such claims would be rejected under 35 USC 102 as being anticipated by Sellon, Brown, or any other reference showing math related indicia thereon. Applicant's

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invention essentially appears to be printed matter presented on a substrate. Claim limitations reciting the content of printed matter will not overcome the prior art where there is no new and nonobvious functional relationship between the printed matter and the underlying substrate. See *In re Ngai*, 70 USPQ2d 1862 (Fed. Cir. 2004) and *In re Gulack*, 217 USPQ 401 (Fed. Cir. 1983).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Preus, Barberi, Nguyen, Brown, Sellon, Washburn, Coleman, Huff, Wade, Verneau, Foster, Hildebrandt, Derr, LeDesma, Kuyath, Fowler, Wentworth, Pollock and Thorpe disclose various devices for teaching math.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kurt Fernstrom whose telephone number is (571) 272-4422. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Kim can be reached on 571 272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kurt Fernstrom/  
Primary Examiner, Art Unit 3711

January 30, 2008